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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/692,927	10/20/2000	Richard Stirling-Gallacher	450117-02828	8382

20999 7590 11/17/2004

FROMMER LAWRENCE & HAUG  
745 FIFTH AVENUE- 10TH FL.  
NEW YORK, NY 10151

EXAMINER
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PHU, PHUONG M

ART UNIT	PAPER NUMBER
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2631

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/692,927

Applicant(s)

STIRLING-GALLACHER, RICHARD

Examiner

Phuong Phu

Art Unit

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This Office Action is responsive to the Amendment filed on 9/2/04.

#### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 11-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11 recites the limitation “the decoding units” on line 5. It is unclear whether the limitation refers to “two effective decoding units” previously recited on line 2, otherwise, the limitation is lack of antecedent basis.

Claim 15 recites the limitation “the decoding units” on line 4. It is unclear whether the limitation refers to “a plurality of effective decoding units” previously recited on line 2, otherwise, the limitation is lack of antecedent basis.

Claim 17 recites the limitation “decoding unit(s)” on lines 1-2. . It is unclear whether the limitation refers to “the other decoding unit(s)”, recited on line 8 of claim 15, otherwise, the limitation is lack of antecedent basis.

Claim 19 recites the limitation “the associated decoding unit”. This limitation is lack of antecedent basis.

Claims, (if any) depended on the above claims, are also rejected with the above reasons.

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4. Claims 11-20 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

Claim 11 omits functional/structural/connectional interrelationships of elements, e.g., “two effective decoding units”, “a respective decoding unit” and “a subset of the decoding units” to one another mutually in order to make the claimed a turbo decoder as a complete operative and connective system.

Claim 13 omits functional/structural/connectional interrelationships of elements, e.g., first decoding unit and second decoding unit to each other, and to other elements (e.g., “two effective decoding units”, “a respective decoding unit”, “a subset of the decoding units”, etc.), recited in claim 11, in order to make the claimed a turbo decoder as a complete operative and connective system.

Claim 15 omits functional/structural/connectional interrelationships of elements, e.g., decoding units, in “a plurality of effective decoding units”, and a subset of the decoding units, to one another mutually to make the system recited in the claimed method as a complete operative and connective system.

Claim 15 omits limitation(s), in associated with elements “a plurality of effective decoding units” to clarify the functions and/or operations of “a soft output Viterbi algorithm”, otherwise the limitation “a soft output Viterbi algorithm” would be given a patentable weight as an algorithm.

Claim 18 omits functional/structural/connectional interrelationships of elements first decoding unit and second decoding units, recited in “first and second decoding units” on lines 1-

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2), to each other and to other elements (e.g., decoding units in “a plurality of effective decoding units” and a subset of the decoding units), recited in claim 15, to make the system recited in the claimed method as a complete operative and connective system.

Claim 20 omits limitation(s), in associated with the claimed method, to clarify the functions and/or connections for performing the limitation “a parallel concatenated scheme”, recited on line 2; otherwise, the limitation would be given a patentable weight as a scheme.

Claims, (if any) depended on the above claims, are also rejected with the above reasons.

#### ***Response to Arguments***

5. Applicant's arguments filed on 9/2/04 have been fully considered.

The objection to the Specification has been withdrawn since the Specification was amended to overcome the objection.

Applicant's arguments, with respect to the newly-added claims 11-20, have been considered. However, the claims are rejected with reasons set forth above in this Office Action.

#### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

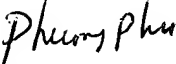
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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Phu whose telephone number is 571-272-3009. The examiner can normally be reached on M-F (6:30-2:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Phuong Phu  
11/08/04

**PHUONG PHU**  
**PRIMARY EXAMINER**

Phuong Phu  
Primary Examiner  
Art Unit 2631